



# **Shanti Swarup Bhatnagar Prize For Science and Technology**

## **Regulations & Proforma**

COUNCIL OF SCIENTIFIC & INDUSTRIAL RESEARCH  
HUMAN RESOURCE DEVELOPMENT GROUP  
NEW DELHI  
INDIA

2020

# Regulations Governing the Award of the Shanti Swarup Bhatnagar Prize For Science and Technology

## PREAMBLE

1. The award is named after the founder Director of the Council of Scientific & Industrial Research (CSIR), the late Dr (Sir) Shanti Swarup Bhatnagar and is known as the 'Shanti Swarup Bhatnagar (SSB) Prize for Science and Technology'.
2. The Prize is given each year for outstanding contributions to science and technology.

## NATURE

3. SSB Prizes, each of the value of Rs 5,00,000 (Rupees five lakh) are awarded annually for notable and outstanding research, fundamental or applied, in the following disciplines:  
(1) Biological      (2) Chemical  
(3) Earth-Atmosphere-Ocean-Planetary (4) Engineering  
(5) Mathematical   (6) Medical   and      (7) Physical Sciences.

## PURPOSE

4. Recognition of outstanding Indian work in science and technology.

## ELIGIBILITY

5. Any citizen of India engaged in research in any field of science and technology up to the age of 45 years as reckoned on 31<sup>st</sup> December of the year preceding the year of the Prize. Overseas citizen of India (OCI) and Persons of Indian Origin (PIO) working in India are also eligible.
6. The Prize is bestowed on a person who, in the opinion of CSIR, has made conspicuously important and outstanding contributions to human knowledge and progress – fundamental or applied – in the particular field of endeavour, which is his/her specialization.
7. The Prize is awarded on the basis of contributions made through work done primarily in India during the five years preceding the year of the Prize. (For this purpose 'primarily' will mean 'for the most part')

## AWARD OF THE PRIZE

8. In awarding the Prize, the Governing Body of CSIR is guided by the recommendations of the Advisory Committees constituted under *clause 10*.

## NOMINATION

9. Names of candidates may be proposed by a member of the Governing Body of CSIR; Presidents of academies of all-India character; Vice Chancellors of Indian Universities; deemed Universities and Institutions of national importance; Deans of Science, Engineering, Medical, Agriculture, and Technology Faculties; Directors of the Indian Institutes of Technology (IIT); Directors General of the major R&D Organizations, such as the Defence Research & Development Organization, the Indian Council of Agricultural Research, the Indian Council of Medical Research, India Meteorological Department; Chairmen of Atomic Energy Commission, Oil & Natural Gas Corporation, etc.; Directors of CSIR Laboratories/ Institutes, Bhabha Atomic Research Centre, Tata Institute of Fundamental Research, Physical Research Laboratory, Indian Association for the Cultivation of Science, etc.; Secretaries of the Government Science Departments like the Department of Atomic Energy, the Department of Biotechnology, the Department of Environment, the Department of Information Technology, the Department of Ocean Development, the Department of Science and Technology, the Department of Scientific and Industrial Research, the Department of Space; etc., Member in-charge (Science) in the Planning Commission (now NITI Aayog); and the former Bhatnagar Prize Awardees.

University Faculties should recommend scientists working in their institutions only and route

nominations through their respective Vice Chancellors, while the Faculties in IITs are required to send their nominations through their Directors. The Directors General of the R&D Organizations and the Chairmen of Commissions may sponsor names of scientists working in their respective organizations. The Directors of CSIR laboratories/ institutes can nominate candidates in disciplines of their interest irrespective of the fact whether they are working in CSIR laboratories/ institutes or outside. The recipient of a Bhatnagar Prize can send nomination of one person only for each year's award. Nominations from other individuals sponsoring their own names or of others are **not** acceptable. Each nomination, as per the prescribed pro-forma, should be accompanied by a detailed statement of work and attainments of the nominee and a critical assessment report (not more than 500 words) bringing out the importance of significant research and development contributions of the nominee made during the five years preceding the year of the Prize. **Nominations not made as per prescribed format are unacceptable.**

**A candidate once nominated would be considered for a total period of three years, if age-wise eligible.** Once such a nomination has been received, CSIR may correspond directly with the *nominator* for supplementary information, if necessary. In case a nominee has resigned from his present position in India and has gone abroad, his nomination would become invalid immediately.

Nomination(s) in original addressed to the **Scientist Incharge, SSB YSA Unit, Human Resource Development (HRD) Group, CSIR Complex, Library Avenue, Pusa, New Delhi 110 012, India** should be sent as per the prescribed proforma latest by **31<sup>st</sup> March 2020.**

The PDF version of duly filled proforma, significant publications and photograph of the proposed nominee are also required in a USB/Pen drive.

The details of the SSB Prize and the prescribed proforma for nomination may be obtained from the above address or may also be downloaded from the website: **[www.csirhrdg.res.in](http://www.csirhrdg.res.in)**

## **ADVISORY COMMITTEES**

- 10 The Advisory Committees for each year's award are constituted with the approval of the Chairman of the Governing body of CSIR. The Committees consist of at least six experts including at least one former Bhatnagar Awardee in the respective discipline. On receipt of nominations for a particular year, CSIR circulates the list of nominees along with the detailed statement of work and attainments of each candidate to all members of the Advisory Committee related to the concerned discipline. CSIR convenes meetings of the various Advisory Committees in consultation with the Chairmen, for selecting the recipients of the SSB Prizes. The composition of various Committees, the information submitted for their scrutiny, the proceedings of the meetings and the procedure for consideration of the nominations, other than as detailed herein, are kept confidential.
- 11 Where the recommendation for the Prize is unanimous or not less than 2/3<sup>rd</sup> of the members of the Advisory Committee have agreed to one name (or maximum of two names in case they are judged to be of equivalent merit), the recommendations are submitted to CSIR for approval.
- 12 The award of the Prize in a specific discipline may be withheld by CSIR in any year, if, in the opinion of the Advisory Committee, no sufficiently meritorious candidate is found suitable in that year.

## **PRESENTATION**

- 13 The names of the recipients are made public on 26 September, the CSIR Foundation Day by the Director General, CSIR.
- 14 The Prizes are awarded at a formal presentation ceremony arranged by CSIR. At the ceremony, a suitable citation on work of the recipient of the Prize is read out.
- 15 The SSB Awardee should give a lecture in the area of the award, especially in a small college or a CSIR laboratory preferably away from the Awardee's city for dissemination of science. CSIR-HRDG can help by providing TA/DA for this.
- 16 In all matters of award of SSB Prizes, the decision of CSIR shall be final



## Council of Scientific & Industrial Research

Human Resource Development Group  
CSIR Complex, Pusa, New Delhi 110 012, India

### SHANTI SWARUP BHATNAGAR PRIZE FOR SCIENCE & TECHNOLOGY NOMINATION FOR THE YEAR 2020

Nomination(s) in original must be forwarded latest by 31<sup>st</sup> March 2020. The PDF version of duly filled proforma, significant publications and photograph of the proposed nominee are also required in a USB Pen drive.

Nominee  
Photograph

- Name of the nominee in Full:  
(Both in English and Hindi)
- (a) Date and place of birth (Enclose self attested copy of age certificate) :  
(b) Nationality: (c) Gender: M/F  
(d) Age as on 31<sup>st</sup> Dec 2019: \_\_\_ Year(s)\_\_\_ Month(s)\_\_\_ Day(s)
- Address with Telephone / Mobile / Fax / email:  
(a) Official Address: (b) Residential Address:  
(c) Mobile: (d) email :
- Discipline under which to be considered (only **ONE** to be marked / encircled):  
(i) Biological (ii) Chemical (iii) Earth-Atmosphere-Ocean-Planetary (iv) Engineering  
(v) Mathematical (vi) Medical and (vii) Physical Sciences
- Nominee's field of specialization:
- Academic Qualifications (Bachelor's Degree onwards) [in a tabular form (Please strictly follow specimen-I)]  
Title of the Ph D thesis and name of the guide
- Date of joining the Institution (Designation & Scale)
- Positions held earlier (in chronological order) [in a tabular form (Please strictly follow specimen-II)]:
- Details of CSIR Fellowship/ Associateship held, if any or from other sources/ agencies.  
(Indicate dates of joining & leaving):
- (a) Significant foreign assignments (Please strictly follow specimen-III):  
(b) Total time spent abroad during last five years: \_\_\_ Year(s)\_\_\_ Month(s)\_\_\_ Day(s)
- Names, address and area of specialization of 10 Distinguished/ Renowned Scientists including five (5) in India in the area (As possible referees):

| Name | Complete Address<br>(with designation & department) | Specialization | Email address |
|------|---|----------------|---------------|
|      |   |                |               |

- (a) Significant contributions to science and/ or technology development by the nominee based on the work done in India during most part of last 5 years (in about 500 words)  
Specific reference is to be made to research papers published and patents taken in this context.  
**(b) Summarise the most significant work of the nominee on which the recommendation is based (in 50 words)**  
(c) Impact of the contributions in the field concerned, basic or applied:

- (d) Places where **work of last 5 years** has been referred/ cited in Books, Reviews: give Citation Index of the contribution [Enclose as Annexure 12 (d)]. Please provide PDF version as Annexure 12(d) in USB Pen drive:
- (e) Names of the industries in which the technology(ies) has (have) been used (give the production figures of products)
13. Have the achievements already been recognised by Awards by any learned body. If so, the name of the body, award and the year of award may be given. (A copy of the citation should be enclosed):
14. Is the nominee a fellow of the Indian National Science Academy / Indian Academy of Sciences / National Academy of Sciences / others (give details):
15. Has the nominee delivered invited lecture(s) in India / abroad and/ or chaired any scientific International Conference Symposium (give details):
16. (a) List of nominee's 10 most significant publications [Reprints to be enclosed as Annexure 16(a)] Please provide PDF version of reprints as Annexure 16(a) in USB Pen drive.
- (b) List of nominee's 5 most significant publications during the last 5 years [Reprints of **two** most significant publications to be enclosed as Annexure 16(b)]. Please provide PDF version of reprints as Annexure 16(b) in USB Pen drive.
- (c) List of nominee's 5 most significant publications from out of work done in India during the last five years: [Enclose as annexure 16 (c)]. Please provide PDF version of reprints as Annexure 16(c) in USB Pen drive.
- (d) Complete list of publications in standard refereed journals: [Enclose as annexure 16 (d)]. Please provide PDF version of reprints as Annexure 16(d) in USB Pen drive.
- (e) Complete list of publications with foreign collaborators (indicating nominee status as author): [Enclose as annexure 16 (e)]. Please provide PDF version of reprints as Annexure 16(e) in USB Pen drive.
- (f) List of papers published in Conferences /Symposia/ Seminars, etc.: [Enclose as annexure 16 (f)]. Please provide PDF version of reprints as Annexure 16(f) in USB Pen drive.
- (g) List of the most outstanding Technical Reports/ Review Articles: [Enclose as annexure 16 (g)]. Please provide PDF version as Annexure 16(g) in USB Pen drive.
17. Statement regarding collaboration with scientists abroad.
18. (a) List of Patents taken, if any: (b) Total number of patents granted in last five years:
19. Details of Books published, if any:
20. Any additional information of relevance:

Certified that information given in the above proforma is correct.

Place

Nominator Signature

Date

Nominator Name  
Designation and complete address with email address

**Note:**

- The prescribed nomination proforma (in original) should be neatly typewritten giving complete information about the nominee and sent to

**The Scientist Incharge – SSB YSA Unit  
Human Resource Development Group  
CSIR Complex, Library Avenue, Pusa  
New Delhi 110 012, India  
Email: [ssb@csirhrdg.res.in](mailto:ssb@csirhrdg.res.in)**

- Please strictly follow prescribed format for filling up nomination proforma. Incomplete nomination will not be considered.
- **Please mention current correspondence address, email and area of specialization of the ten Distinguished/Renowned Scientists as possible referees under Serial no 11.**
- Enclose self attested copy of age certificate.

**Check List**

- ❖ **Duly filled nomination proforma in original with signature, name, designation and address of the nominator.**
- ❖ **A USB Pen drive containing**
  - I. **PDF version of self attested age certificate.**
  - II. **PDF version of nomination proforma duly signed by nominator.**
  - III. **PDF version of enclosures as annexure 12(d) and annexure 16 (a) to 16 (g).**
  - IV. **Recent high resolution photograph of the proposed nominee.**

## 6. Specimen-I (Qualifications)

| S No | Degree                       | Subject  | Class<br>CGP marks      | Year    | University    | Additional<br>Particulars       |
|------|------------------------------|--|-------------------------|---------|---------------|---------------------------------|
| 1    | B Sc (Hons)                  | Chemistry<br>(Main)<br>Botany<br>Zoology           | I <sup>st</sup><br>87 % | 1982    | Madras        | I Rank<br>Gold<br>Medalist      |
| 2    | M Sc                         | Chemistry  | I <sup>st</sup><br>9.2  | 1984    | Madras        | I Rank                          |
| 3    | Ph D                         | Chemistry of<br>Transitional<br>Metal<br>Complexes |                         | 1989    | Bombay        | Thesis<br>adjudged<br>Excellent |
| 4    | Post-Doc<br>Research<br>Work | Chemical<br>Technology                             |                         | 1991-92 | Leeds<br>U.K. |                                 |

## 8. Specimen-II (Positions held from the beginning)

| S No | Period           | Place of Employment     | Designation      | Scale of pay                  |
|------|------------------|-------------------------|------------------|-------------------------------|
| 1    | May 89-Aug 91    | CLRI Madras             | Scientist B      | Rs 700-1400 (Then)            |
| 2    | Sep 91-Aug 92    | University of Leeds, UK | Exchange Scholar | Indo-UK Exchange<br>Programme |
| 3    | Sep 92 till date | Hyderabad University    | Professor        | Rs 4500-7000(Then)            |

## 10. Specimen-III (All Visits Abroad)

| S No | Period of visit |          | Institute/ country visited | Purpose of visit |
|------|-----------------|----------|----------------------------|------------------|
|      | From            | To       |                            |                  |
| 1    | 01-08-95        | 31-05-96 | Purdue University          | Teaching         |
| 2    | 01-05-00        | 30-06-00 | Singapore University       | Research         |
| 3    | 04-02-02        | 14-02-02 | Texas, USA                 | Intl. Conference |

## For further information kindly contact:

**Head**  
**Human Resource Development Group**  
**Council of Scientific & Industrial Research**  
**CSIR Complex, Library Avenue, Pusa**  
**New Delhi 110 012**

Tel.: (011) 25848632, 25841568  
 Fax: (011) 2584 0887  
 Website: [www.csirhrdg.res.in](http://www.csirhrdg.res.in)

Dr Inderpal Singh, Scientist Incharge  
 Dr Manish Bhardwaj, Principal Scientist

Tel.: (011) 2584 6777  
 E-mail: [ssb@csirhrdg.res.in](mailto:ssb@csirhrdg.res.in)

**Last date for receipt of nominations for SSB Prize is 31<sup>st</sup> March 2020**